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## METHODS FOR PRODUCTION OF ARRAYS WITH MODIFIED OLIGONUCLEOTIDE AND POLYNUCLEOTIDE COMPOSITIONS

## ABSTRACT OF THE DISCLOSURE

The present invention provides methods for producing arrays having associated modified nucleic acid structures, e.g. acid stable and/or end-blocked nucleic acids such as 2'-O-R oligonucleotides. In one embodiment, arrays produced using the methods of the invention exhibit an increased binding affinity with complementary nucleic acids, and in particular with complementary RNA. In another embodiment, the associated nucleic acids of the array produced using the methods of the invention exhibit substantial acid resistance, allowing the arrays to be treated with low pH solutions. In another embodiment, the modified associated nucleic acids of the array produced using the methods of the invention exhibit substantial resistance to nuclease degradation.

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